

From: [Olsen, Tony](#)
To: [Roser, Sara](#)
Cc: [Peck, Dave](#); [Nelson, Walt](#); [Hansen, Virginia](#)
Subject: RE: Hawaii 2001 and 2003 emap data
Date: Monday, April 08, 2013 9:10:04 AM

Gulf Breeze did the designs during this period. What I have is below. They used a very old hexagon sampling program that I would no longer recommend being used. If you want to keep the classes for Oahu, that would be fine. Virginia Hansen in Gulf Breeze may be able to provide more information.

It would be better to define the regions that are most appropriate for the NPDES discharge permit regions and the current NCCA regions for the area. Walt Nelson may also know more about the design and what may be appropriate for your question as well.

Having the regional permit monitoring integrated with NCCA 2015 may be desirable as well.

Tony

Hawaii	West	University of Hawaii EPA Region 10 EPA - WED	2	2001-2002	This design is comprised of a statewide assessment of estuaries and several special studies. The statewide samples were subdivided into 4 resource classes based on size with a special class for south shore Oahu estuaries (3 classes.) Each primary class used a different hexagonal grid size (0.55, 2.5, 4.98, 6.78 sq km) to result in 50 sampling sites (10, 10, 10, and 20, respectively). The three classes of south shore Oahu estuaries resulted in 3 grid sizes (0.05, 0.03 and 0.02 km ²) and 30 sites (22, 3 and 5 sites, respectively). Additional intensifications for Oahu south shore beaches, inshore Mamala Bay and offshore Mamala Bay and two discharge areas were completed. The beach uses linear segments of 1075 m resulting in 30 probabilistic sites. The inshore Mamala Bay area uses a grid of 0.7 sq km and 30 sites while the offshore area used a grid of 2.22 sq km resulting in 40 sites. Within
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				Mamala Bay there are two intensifications at discharge ports (one uses a grid of 0.05 sq km and 15 sites and the other at 0.01 sq km and 15 sites).
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From: Peck, Dave
Sent: Friday, April 05, 2013 9:40 AM
To: Olsen, Tony
Cc: Roser, Sara
Subject: FW: Hawaii 2001 and 2003 emap data

HELP PLEEZE??!!

From: Roser, Sara
Sent: Friday, April 05, 2013 8:47 AM
To: Peck, Dave
Subject: Hawaii 2001 and 2003 emap data

Hi Dave,

The Hawaii Dept. of Health is in the process of reissuing NPDES discharge permits for two WWTP plants on south Oahu (Sand Island and Honouliuli). We would like to add a requirement to the permit for regional monitoring. I believe there were two emap studies on the coast of southern Oahu in 2001 and 2003. We thought it might be good to follow the same design during the next permit period. Do you have any information from these two studies from 2001 and 2003? I have found pieces of data sets, but I have not yet found the original study design or sample site locations.

By the way, we really appreciated the R training in March.

Thanks very much.
Sara